What is claimed is:

1. A liquid crystal light valve comprising:

a plurality of light-reflecting films with one or more spaces therebetween;

a semiconductor substrate connected electrically to the light-reflecting films;

a counter substrate provided on an incident-light side thereof;

liquid crystal disposed in a cell gap formed between the light-reflecting films and the counter substrate;

counter electrodes provided on the counter-substrate;

an electric circuit formed in the semiconductor substrate, which is configured to apply voltage to the light-reflecting films and the counter electrodes formed on the counter substrate;

a light-blocking layer formed below the light-reflecting films;

a first insulating layer formed between the light-blocking layer and the electric circuit;

a second insulating layer formed between the light-reflecting films and the light-blocking layer;

a stud which is configured to electrically connect the electric circuit and the light-reflecting films;

light shields provided on the light-blocking layer formed below the light-reflecting films; and

a third insulating layer formed between the light shields and the light-reflecting films;

wherein at least one of said light shields and said light-blocking layer is configured to block the incident light from the electric circuit.

2. The liquid crystal light valve according to claim 1, wherein the light-blocking layer is formed just below the light shields.

3. The liquid crystal light valve according to claim 1, wherein the electric circuit in the semiconductor substrate has a storage capacitance.

4. The liquid crystal light valve according to claim 1, wherein the electric circuit in the semiconductor substrate does not have a storage capacitance.

5. The liquid crystal light valve according to claim 1, wherein the stud and the light shields are formed from one substance selected from the group consisting of Ti, W, Mo, Cu, Al, alloys thereof, and compounds thereof with silicon.

6. The liquid crystal light valve according to claim 1, wherein the light-blocking layers are formed by laminating at least one metal selected from a group consisting of Al, Cr-Cr_xO_y, Ti, TiN, and TiN_xC_y.

7. The liquid crystal light valve according to claim 1, wherein the third insulating layer has a thickness of 50 Å to 1000 Å.

8. The liquid crystal light valve according to claim 1, wherein the light-reflecting films have ends, and wherein the light shields are formed below the inside peripheral portions of the light-reflecting films at least 0.2 μm from the ends thereof.

9. The liquid crystal light valve according to claim 1, wherein the first, the second, and the third insulating layers contain at least one substance selected from the group consisting of SiO_2, Si_3N_4, TaO_x, ZrO_x, diamond carbon, and polyamide.

10. The liquid crystal light valve according to claim 9, wherein the first and the second insulating layers are formed from one substance selected from the group consisting of SiO_2, Si_3N_4, TaO_x, and ZrO_x.

11. The liquid crystal light valve according to claim 9, wherein the third insulating layer is formed from one substance selected from the group consisting of Si_3N_4, TaO_x, and ZrO_x.

12. A liquid crystal light valve comprising:

a plurality of light-reflecting films with one or more spaces therebetween, wherein said light-reflecting films have inside peripheral portions;

a semiconductor substrate connected electrically to the light-reflecting films;

a counter substrate provided on an incident-light side thereof;

liquid crystal disposed in a cell gap formed between the light-reflecting films and the counter substrate;

counter electrodes provided on the counter substrate;

an electric circuit formed in the semiconductor substrate, which is configured to apply voltage to the light-reflecting films and the counter electrodes formed on the counter substrate;

a light-blocking layer formed below the light-reflecting films;

a first insulating layer formed between the light-blocking layer and the electric circuit;

a second insulating layer formed between the light-reflecting films and the light-blocking layer;

a stud which is configured to electrically connect the electric circuit and the light-reflecting films;

light shields provided on the light-blocking layer formed below the inside peripheral portions of the light-reflecting films; and

a third insulating layer formed between the light shields and the light-reflecting films;

wherein at least one of said light shields and said light-blocking layer are configured to block the incident light from the electric circuit.

13. The liquid crystal light valve according to claim 12, wherein the light-blocking layer is formed just below the light shields.

14. The liquid crystal light valve according to claim 12, wherein the electric circuit in the semiconductor substrate has a storage capacitance.

15. The liquid crystal light valve according to claim 12, wherein the electric circuit in the semiconductor substrate does not have a storage capacitance.

16. The liquid crystal light valve according to claim 12, wherein the stud and the light shields are formed from one substance selected from the group consisting of Ti, W, Mo, Cu, Al, alloys thereof, and compounds thereof with silicon.

17. The liquid crystal light valve according to claim 12, wherein the light-blocking layers are formed by laminating at least one metal selected from a group consisting of Al, Cr-Cr_xO_y, Ti, TiN, and TiN_xC_y.

18. The liquid crystal light valve according to claim 12, wherein the third insulating layer has a thickness of 50 Å to 1000 Å.

19. The liquid crystal light valve according to claim 12, wherein the light-reflecting films have ends, and wherein the light shields are formed below the inside peripheral portions of the light-reflecting films at least 0.2 μm from the ends thereof.

20. The liquid crystal light valve according to claim 12, wherein the first, the second, and the third insulating layers contain at least one substance selected from the group consisting of SiO_2, Si_3N_4, TaO_x, ZrO_x, diamond carbon, and polyamide.

21. The liquid crystal light valve according to claim 20, wherein the first and the second insulating layers are formed from one substance selected from the group consisting of SiO_2, Si_3N_4, TaO_x, and ZrO_x.

22. The liquid crystal light valve according to claim 20, wherein the third insulating layer is formed from one substance selected from the group consisting of Si_3N_4, TaO_x, and ZrO_x.

23. A liquid crystal light valve comprising:

a plurality of light-reflecting films with one or more spaces therebetween, wherein said light-reflecting films have inside peripheral portions;

a semiconductor substrate connected electrically to the light-reflecting films;

a counter substrate provided on an incident-light side thereof;

liquid crystal disposed in a cell gap between the light-reflecting films and the counter substrate;

an electric circuit formed in the semiconductor substrate, which is configured to apply voltage to the light-reflecting films and the counter electrodes formed on the counter substrate;

a light-blocking layer formed below the light-reflecting films;

a first insulating layer formed between the light-blocking layer and the electric circuit;

a second insulating layer formed between the light-reflecting films and the light-blocking layer;

a stud which is configured to electrically connect the electric circuit and the light-reflecting films;

light shields formed below the area including the inside peripheral portions of the light-reflecting films and the space between the light-reflecting films; and

a third insulating layer formed between the light shields and the light-reflecting films;

wherein at least one of said light shields and said light-blocking layer is configured to block the incident light from the electric circuit.

24. The liquid crystal light valve according to claim 23, wherein the light-blocking layer is formed just below the light shields.

25. The liquid crystal light valve according to claim 23, wherein the electric circuit in the semiconductor substrate has a storage capacitance.

26. The liquid crystal light valve according to claim 23, wherein the electric circuit in the semiconductor substrate does not have a storage capacitance.

27. The liquid crystal light valve according to claim 23, wherein the stud and the light shields are formed from one substance selected from the group consisting of Ti, W, Mo, Cu, Al, alloys thereof, and compounds thereof with silicon.

28. The liquid crystal light valve according to claim 23, wherein the light-blocking layers are formed by laminating at least one metal selected from a group consisting of Al, Cr-Cr_xO_y, Ti, TiN, and TiN_xC_y.

29. The liquid crystal light valve according to claim 23, wherein the third insulating layer has a thickness of 50 Å to 1000 Å.

30. The liquid crystal light valve according to claim 23, wherein the light-reflecting films have ends, and wherein the light shields are formed below the inside peripheral portions of the light-reflecting films at least 0.2 μm from the ends thereof.

31. The liquid crystal light valve according to claim 23, wherein the first, the second, and the third insulating layers contain at least one substance selected from the group consisting of SiO_2, Si_3N_4, TaO_x, ZrO_x, diamond carbon, and polyamide.

32. The liquid crystal light valve according to claim 31, wherein the first and the second insulating layers are formed from one substance selected from the group consisting of SiO_2, Si_3N_4, TaO_x, and ZrO_x.

33. The liquid crystal light valve according to claim 31, wherein the third insulating layer is formed from one substance selected from the group consisting of Si_3N_4, TaO_x, and ZrO_x.

34. A projection-type liquid crystal display device comprising:

a light source;

a projection lens; and

a light valve, said light valve comprising:

a plurality of light-reflecting films with one or more spaces therebetween;

a semiconductor substrate connected electrically to the light-reflecting films;

a counter substrate provided on an incident-light side thereof;

liquid crystal disposed in a cell gap formed between the light-reflecting films and the counter substrate;

counter electrodes provided on the counter-substrate;

an electric circuit formed in the semiconductor substrate, which is configured to apply voltage to the light-reflecting films and the counter electrodes formed on the counter substrate;

a light-blocking layer formed below the light-reflecting films;

a first insulating layer formed between the light-blocking layer and the electric circuit;

a second insulating layer formed between the light-reflecting films and the light-blocking layer;

a stud which is configured to electrically connect the electric circuit and the light-reflecting films;

light shields provided on the light-blocking layer formed below the light-reflecting films; and

a third insulating layer formed between the light shields and the light-reflecting films;

wherein at least one of said light shields and said light-blocking layer is configured to block the incident light from the electric circuit.

the liquid crystal light valve according to claim 1.

35. A projection-type liquid crystal display device comprising:

a light source;

a projection lens; and

a light valve, said light valve comprising:

a plurality of light-reflecting films with one or more spaces therebetween, wherein said light-reflecting films have inside peripheral portions;

a semiconductor substrate connected electrically to the light-reflecting films;

a counter substrate provided on an incident-light side thereof;

liquid crystal disposed in a cell gap formed between the light-reflecting films and the counter substrate;

counter electrodes provided on the counter substrate;

an electric circuit formed in the semiconductor substrate, which is configured to apply voltage to the light-reflecting films and the counter electrodes formed on the counter substrate;

a light-blocking layer formed below the light-reflecting films;

a first insulating layer formed between the light-blocking layer and the electric circuit;

a second insulating layer formed between the light-reflecting films and the light-blocking layer;

a stud which is configured to electrically connect the electric circuit and the light-reflecting films;

light shields provided on the light-blocking layer formed below the inside peripheral portions of the light-reflecting films; and

a third insulating layer formed between the light shields and the light-reflecting films;

wherein at least one of said light shields and said light-blocking layer are configured to block the incident light from the electric circuit.

36. A projection-type liquid crystal display device comprising:

a light source;

a projection lens; and

a light valve, said light valve comprising:

a plurality of light-reflecting films with one or more spaces therebetween, wherein said light-reflecting films have inside peripheral portions;

a semiconductor substrate connected electrically to the light-reflecting films;

a counter substrate provided on an incident-light side thereof;

liquid crystal disposed in a cell gap between the light-reflecting films and the counter substrate;

an electric circuit formed in the semiconductor substrate, which is configured to apply voltage to the light-reflecting films and the counter electrodes formed on the counter substrate;

a light-blocking layer formed below the light-reflecting films;

a first insulating layer formed between the light-blocking layer and the electric circuit;

a second insulating layer formed between the light-reflecting films and the light-blocking layer;

a stud which is configured to electrically connect the electric circuit and the light-reflecting films;

light shields formed below the area including the inside peripheral portions of the light-reflecting films and the space between the light-reflecting films; and

a third insulating layer formed between the light shields and the light-reflecting films;

wherein at least one of said light shields and said light-blocking layer is configured to block the incident light from the electric circuit.

37. A method for producing a liquid crystal light valve comprising:

(a) forming a semiconductor substrate, wherein said step of forming a semiconductor substrate comprises the sub-steps of:

(i) forming an electric circuit in the semiconductor substrate for a plurality of light-reflecting films;

(ii) forming a first insulating layer on the electric circuit;

(iii) forming a light-blocking layer on the first insulating layer;

(iv) boring a hole for a stud in the light-blocking layer;

(v) forming a second insulating layer on the light-blocking layer, wherein said second insulating layer has an upper surface;

(vi) boring a groove for a stud in the second insulating layer and the first insulating layer;

(vii) boring grooves for light shields in the second insulating layer;

(viii) forming a stud in the hole in the light-blocking layer and in the grooves in the first and the second insulating layers, said stud configured to electrically connect the light-reflecting films and the electric circuit, wherein said stud has an upper surface;

(ix) forming light shields on the light-blocking layer, which shields are configured to block incident light from a space between the light-reflecting films, wherein said light shields have an upper surface;

(x) forming a third insulating layer all over the upper surfaces of the second insulating layer, the stud, and the light shields;

(xi) removing the third insulating layer from the upper surface of the stud; and

(xii) forming the plurality of light-reflecting films patterned for each electric circuit on the third insulating layer; and

(b) forming a liquid crystal panel, wherein said step of forming a liquid crystal panel comprises the sub-steps of:

(i) aligning the semiconductor substrate and a counter substrate having a counter electrode; and

(ii) filling liquid crystal in a cell gap formed by a spacer, said cell gap formed between the light reflecting films and the counter electrodes.

38. The method of claim 37, wherein said sub-steps (a)(vi) and (a)(vii) are performed substantially together, and wherein said sub-steps (a)(viii) and (a)(ix) are performed substantially together.